Notice of Allowability	Application No. 10/539,645	Applicant(s) PARKER, BRUCE
	Examiner Brian Young	Art Unit 2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Preliminary Amendment filed 6/15/06*.

2. ☒ The allowed claim(s) is/are *1-17*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Detailed Action

1.   The Preliminary Amendment filed 6/15/05 has been entered.

2.   Claims 1-17 are allowed.

3.   The following is an examiner's statement of reasons for allowance:

Independent claims 1,8,14,15,16, and 17 recite a method for compressing a data file,

which includes a sequence of bytes of a length greater than or equal to a predefined-

length. The method further including the steps of retrieving the data file from a

secondary storage device; storing the data file in a direct access memory, calculating

the frequency of unique byte values within a sub-sequence of the data file, the sub-

sequence having a length not exceeding the predefined length; creating an index for the

sub-sequence, the index including a data value representing the calculated frequency of

unique byte values within the sub- sequence; and on the sub-sequence having a

frequency of unique byte values below a predetermined threshold, applying a data

transformation to the sub-sequence to increase the frequency of unique byte values in

the sub-sequence and adding to the index a data value representing the data

transformation. *In particular, the steps of adding to the index a data value representing*

the data transformation of the sub-sequence having a frequency of unique byte values

above a predefined threshold, adding to the index a data value representing the position

of one or more unique values within the sub-sequence and creating an output data file,

the data file having a file type identifier, and adding the index to the output data file,

have not been shown in the data compression art of record.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

4.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Tu et al (JP02006174487) disclose reversible overlap compression for *lossless data*

compression using pre- and post-filters (as the reversible overlap operators).

Erb et al 6,961,927 disclose *lossless data compression* implemented using a data

aware compression scheme that is specific to the type of data being compressed. A

modified delta compression scheme is used in which difference information is encoded

with reference to a set of typical difference values that commonly occur for the type of

data being compressed.

Sadeh 6,868,186 discloses an *image compression* method including separating an

image into a plurality of color channel sub-images and processing each of the color

channel sub-images.

Kampf 6,657,565 discloses a method for *increasing compression efficiency of a lossless data compression system* by segmenting input data streams into independently decompressible data blocks and a history buffer that maintains a history of matching character sequences using the history buffer to identify repeated character sequences within the data segment.

Jeong 6,628,717 discloses *a lossless coding method wherein a digital video data* inclusive of motion picture or still picture is compared to a threshold value, data greater than the threshold value, data smaller than the threshold value, and positional information on the data are obtained, and the data are subjected to Golomb Rice Coding, to compression coding the video data. And, a process is repeated for at least one stage, in which data are classified through comparison to a threshold value such that the digital video data to be compressed is closest to a level to apply the Golomb Rice Coding whereby improving compression transmission performance.
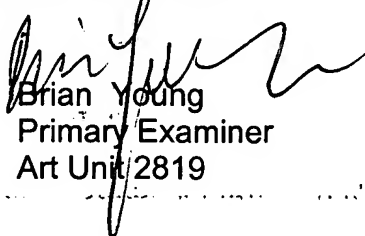
Lempel –Ziv disclose (IEEE TRANSACTIONS ON INFORMATION THEORY, VOL. IT-23, NO. 3, MAY 1977) a universal compression algorithm for sequential data wherein the compression ratio is achieved as universal code uniformly approaches the lower bounds on the compression ratios attainable by block-to-variable codes and variable-to-block codes designed to match a specified data source.

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian Young whose telephone number is 571-272-1816.

The examiner can normally be reached on Mon-Fri 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian Young
Primary Examiner
Art Unit 2819

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